

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

REMARKS

The Office Action of November 17, 2003 has been received and its contents carefully considered.

Claims 1, 2, 4 and 16 to 23 all the claims pending in the application, prior to the present amendment.

Claims 16-18, 19 (16-18), 20 (16-18), 21 (16-18), 22 (16-18), 22 and 26 (sic) have been rejected under the first paragraph of 35 U.S.C. § 112 as failing to comply with the written description requirement.

The Examiner states that these claims contain subject matter which was not described in the original specification.

The Examiner sets forth four reasons for this rejection. Applicants discuss each reason below.

Before doing so, applicants note that the Examiner's reference to claim 26 apparently is in error. Applicants believe the Examiner intended to refer to claim 23.

(a) The Examiner states that with respect to claims 16-18 and the claims dependent therefrom, the original specification does not provide any support for embodiments where the intermediate layer "does not contain titanium oxide". The Examiner acknowledges that applicants have argued that the amendment finds support in Example 9 of the specification. The Examiner states that Example 9 is silent as to the titanium oxide content of the intermediate

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

layer. The Examiner asserts that the courts have held that the mere absence of a positive recitation is not a basis for an exclusion. The Examiner refers to MPEP § 2173.05(i).

In response, applicants have cancelled claims 16 and 18, and submit that Example 9 provides support for the recitation of the absence of titanium dioxide in the intermediate layer in claim 17.

Applicants submit that the Examiner has overlooked disclosures in the present specification which specifically disclose that the intermediate layer of Example 9 and claim 17 does not contain titanium dioxide.

In particular, Table 2 at page 73 of the specification specifically indicates that the intermediate layers (IL) of Examples 8 to 15 do not contain titanium dioxide. Moreover, the present specification at page 75, lines 16-21, specifically states that the invention Examples 9, 10, 11, 13, 14 and 15 do not contain a titanium compound.

Example 9 has an intermediate layer thickness of 100 μm and a base layer that contains a vinyl chloride resin having a degree of chlorination of 58 to 73% with its composition B, and an intermediate layer having a vinyl chloride resin with a degree of chlorination of 56% with its composition C. Therefore, applicants submit that Example 9 is within the scope of the recitations of claim 17.

Thus, applicants submit that claim 17 is supported by the specification.

(b) The Examiner states that with respect to claim 22, the original disclosure does not contain support for the intermediate layers of claims 1, 2 and 4 where the thickness of the

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

intermediate layer is 25 to 150 μm . Claims 1, 2 and 4 require that the intermediate layer have a chlorination degree of 58 to 73%.

In response, applicants have amended claim 22 to depend from claim 17 only.

(c) The Examiner states that with respect to claim 26 (applicants believe the Examiner intended to refer to claim 23), the original disclosure does not contain support for antistatic layers with a thickness of from 0.1 to 1.5 μm .

The present specification, at page 40, indicates that when a tin oxide or conductive titanium oxide is used as a conductive material in an antistatic layer, the thickness of the antistatic layer is from 0.3 to 1.5 μm .

Accordingly, applicants have amended claim 23 to recite that the antistatic layer contains a conductive material which is at least one of tin oxide and a conductive titanium oxide, and to recite the thickness to 0.3 to 1.5 μm .

(d) The Examiner asserts that with respect to claim 23, there is no support for laminates comprising an intermediate layer where the laminate has a light transmittance of 40% or more, a haze value of 60% or less, and wherein the total thickness of the laminate is 3 mm.

The Examiner states that the specification, at page 40, last paragraph, discloses these values for laminates comprising a base layer and an antistatic layer, but do not disclose these values when the laminate comprises an intermediate layer.

In response, applicants have amended claim 23 to recite a light transmittance of 62% or more and a haze of 8.3% or lower, and refer the Examiner to the information in Table 2, which

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

shows laminates comprising an intermediate layer having these values. See especially Example 10, which is within the scope of claim 23. The thickness of the laminate of Example 10 is 3 mm plus 300.4 μm , which corresponds to 3.3 mm. Accordingly, applicants have amended claim 23 to recite 3.3 mm.

In view of the above, applicants submit that the claims are based on the subject matter that was described in the original application and, accordingly, request withdrawal of this rejection.

Claims 1, 19 (1), 20 (1) and 21 (1) have been rejected under 35 U.S.C. § 103(a) as obvious over JP '230 to Watanabe in view of Yoshizumi.

The Examiner sets forth a detailed explanation of this rejection in Paragraph 4, beginning at page 4 of the Office Action.

This rejection is similar to the Examiner's rejection in Paragraph 1 of the previous Office Action, except that in the present Office Action, the Examiner argues that the surface layer disclosed in JP '230 is considered to be the base layer of the present claims, and that the composition comprised of 100 parts by weight of vinyl chloride resin having a chlorination degree of 58 to 73% and 4 to 30 parts by weight titanium dioxide is considered to be the intermediate layer.

In a section entitled "Response to Arguments", at page 12 of the Office Action, the Examiner responds to the arguments applicants previously submitted by stating that he is employing the base layer of JP '230, and not the surface layer of JP '230, to satisfy the recitations of the present claims with respect to the intermediate layer.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

Applicants have previously argued against the combination of JP '230 and Yoshizumi with respect to claim 1 on the basis that these references do not disclose an intermediate layer that employs a vinyl chloride resin having a chlorination from 58 to 73%. The Examiner responds to this argument by asserting that he is relying on the surface layer of JP '230 as being the base layer, thereby considering the base layer of JP '230 as being a surface layer corresponding to the intermediate layer of claim 1, which would then covered with an antistatic according to Yoshizumi.

Applicants have amended claim 1 as set forth above to recite a thickness of the base layer of from 1 to 15 mm, and a thickness of the intermediate layer of from 30 to 500 μm .

Thus, as recited in claim 1, the present invention is directed to an antistatic vinyl chloride resin molding, which comprises a base layer comprising a vinyl chloride resin, an intermediate layer and an antistatic layer containing a conductive material and being laminated on at least one side of the base layer, wherein the base layer comprises from 5 to 50 parts by weight of a titanium compound and 100 parts by weight of a vinyl chloride resin, wherein the thickness of the base layer is from 1 to 15 mm, and the intermediate layer comprises a vinyl chloride resin having a chlorination degree of from 58 to 73% and has a composition different from that of the base layer, and wherein the thickness of the intermediate layer is from 30 to 500 μm .

JP '230 discloses, in claim 2 thereof, a fire-retardant laminated molding, in which a base layer and a surface layer are integrated and in which (a) the base layer contains 4 to 30 parts by weight of titanium oxide in a PVC having a chlorination degree of 58 to 73 %, and (b) the surface layer contains 0 to 20 parts by weight of titanium oxide in PVC having a chlorination

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

degree of 50 to 70 %. The Examiner explains that the present invention is disclosed by interpreting the base layer of JP '230 as the intermediate layer of the present invention and the surface layer of JP '230 as the base layer of the present invention.

However, applicants submit that one of ordinary skill in the art would not so interpret JP '230, for a number of reasons, including the amendments as above, which limit the thickness of the base layer and the intermediate layer of claim 1.

JP '230 discloses, in paragraph [0041], a base layer having a thickness of 2 to 12 mm and a surface layer having a thickness of 0.2 to 1.6 mm. Accordingly, applicants submit that it is natural for one skilled in the art to understand that the base layer of JP '230 corresponds to the base layer of the present invention and the surface layer of JP '230 corresponds to the intermediate layer of the present invention, because of the overlapping of the thickness. In particular, one of ordinary skill in the art would consider that the base layer of the layer thickness of JP '230 corresponds to the base layer of the layer thickness in claim 1, and the surface layer of the smaller thickness in JP '230 corresponds to the intermediate layer of the smaller thickness in claim 1.

The Examiner has provided absolutely no reason or basis why one of ordinary skill in the art would interpret JP '230 in the manner suggested by the Examiner.

In addition, in paragraph [0039] of JP '230, the use of a PVC in a surface layer having a chlorination degree of 58% or more is excluded, stating that it is unsuitable (cf. [0039]), so that one cannot conceive an idea of using a PVC having a chlorination degree of from 58 to 73% in

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

this surface layer (intermediate layer of the present application). Since the surface layer of JP '230 is employed with the aim of improving chemical resistance using a PVC having a chlorination degree of from 50 to 57% (cf. [0018]), the use of a PVC having a chlorination degree of from 58 to 73%, which is inferior in chemical resistance, cannot be deduced from this point, too.

Further, even if one of ordinary skill in the art were to interpret JP '230 in the manner proposed by the Examiner, applicants submit that one of ordinary skill in the art would not be led to the invention set forth in claim 1. As discussed above, JP '230 discloses that the base layer should have a thickness of 2 to 12 mm, corresponding to 2000 μm to 12000 μm . If such a base layer is considered to be the intermediate of claim 1, it fails to satisfy the recitation of claim 1 that the intermediate layer has a thickness of 30 to 500 μm .

In view of the above, applicants submit that JP '230 does not disclose or suggest an intermediate layer having a thickness of 30 to 500 μm and which contains a PVC having a chlorination degree of 58 to 73 %.

Turning now to claim 19 (I), which recites that the antistatic layer is comprised of a vinyl chloride resin having a chlorination degree of 58 to 73%, and the Examiner's reliance on the teachings of Yoshizumi, this patent discloses the use of a vinyl chloride resin as an antistatic layer, but does not teach the use of PVC having a chlorination degree of 58 to 73 %. The Examiner explains at page 5 in the Office Action that, because JP '230 discloses in Paragraph [0015] that the chlorination degree influences a thermal stability, a molding property and a

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

working property, a control of the chlorination degree is evident in order to improve these properties.

Applicants point out, however, that the proposed antistatic layer functions as a surface layer. As discussed above, paragraph [0039] of JP '230 teaches against the use of a PVC having a chlorination degree of from 58 to 73% as a surface layer. Therefore, one of ordinary skill in the art is not led to the use of an antistatic layer having such a chlorination degree.

Moreover, Paragraph [0015] of JP '230 refers to a description of properties of PVC for a flame-retardant molding, and not to properties that should be employed in an antistatic layer.

Besides, Paragraph [0032] of JP '230 includes a description that PVC having a chlorination degree of 63 to 67 % is poor in a chemical resistance and an elongation, and, since C-PVC of 63 to 67 % is poor in the working property, PVC of 58 to 73 %, partially overlapping with the aforementioned range, is not to be used for the purpose of improving the chemical resistance or the working property.

Based on these, PVC having a chlorination degree of 58 to 73 % is hardly thinkable as the resin of the antistatic layer for the purposes of improving the thermal stability, molding property and working property.

In view of the above, applicants submit that the JP '230 and Yoshizumi do not disclose or render obvious the subject matter of claims 1, 19(1), 20(1) and 21(1) and, accordingly, request withdrawal of this rejection.

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

Claims 1 and 21(1) have been rejected under 35 U.S.C. § 103(a) as obvious over JP '230 in view of Holley.

The Examiner sets forth a detailed statement of this rejection in Paragraph 5, beginning at page 5 of the Office Action.

This rejection is similar to the above rejection in Paragraph 4, except that the Examiner relies on the Holley patent for teaching of an antistatic composition.

As mentioned above, JP '230 does not disclose or suggest an intermediate layer having a thickness of 50 to 300 μm and comprised of a PVC having a chlorination degree of 58 to 73 %.

There is a disclosure in the Holley patent that a base material having antistatic property is prepared by coating an antistatic paint. However, since JP '230 does not describe or suggest the use of intermediate layer (surface layer) of claim 1, applicants submit that the combination of JP '230 and Holley would not have led one of ordinary skill in the art to the subject matter of the present claims.

In view of the above, applicants submit that JP '230 and Holley do not disclose or suggest the subject matter of claims 1 and 21(1) and, accordingly, request withdrawal of this rejection.

Claims 2, 19(2), 20(2) and 21(2) have been rejected under 35 U.S.C. § 103(a) as obvious JP '945 to Watanabe in view of Yoshizumi.

The Examiner sets forth a detailed statement of this rejection in Paragraph 6 of the Office Action.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

This rejection is substantially similar to the rejection in Paragraph 4 above, except that the Examiner relies on JP '945 as the primary reference instead of JP '230 as the primary reference, and applies the rejection to claim 2.

Applicants first note that the number JP 11-067945A that has been referred to by the Examiner is a patent application number for a patent application filed in Japan on March 15, 1999. This application was published on September 26, 2000 under the No. JP 2000-264976A. Applicants believe the Examiner should have referred to this publication number instead of the application number. In the following discussion, applicants refer to this document as JP '976.

In the section of the present Office Action entitled "Response to Arguments", at page 13, the Examiner states that applicants have argued that JP '976 (Watanabe '945) does not teach the claimed chlorination degree of 58 to 73% of the intermediate layer. The Examiner agrees that JP '976 does not specifically teach this chlorination, but the Examiner takes the position that it would have been obvious to vary the chlorination degree to control the chemical resistance and fire retardants of the laminate.

Applicants have amended claim 2 as set forth above to recite a thickness of the base layer of from 1 to 15 mm, and a thickness of the intermediate layer of from 30 to 500 μm .

Thus, as recited in claim 2, the present invention is directed to an antistatic vinyl chloride resin molding, which comprises a base layer comprising a vinyl chloride resin, an intermediate layer and an antistatic layer containing a conductive material and being laminated on at least one side of said base layer, wherein said base layer comprises a vinyl chloride resin having a

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

chlorination degree of from 58 to 73%, wherein the thickness of the base layer is from 1 to 15 mm and the intermediate layer comprises a vinyl chloride resin having a chlorination degree of from 58 to 73% and has a composition different from that of the base layer, wherein the thickness of the intermediate layer is from 30 to 500 μm .

JP '976 teaches a fire-retardant vinyl chloride resin comprising a base layer and a surface layer, and describes, in claim 4 thereof, the use of PVC having a chlorination degree of 58 to 73 % as a base layer and the use of PVC having a chlorination degree of between 50 or more to less than 58 % as a surface layer. These points are described also in Paragraph [0040] which is pointed out by the Examiner.

The Examiner also relies on paragraphs [0024] and [0025] of JP '976. Paragraph [0023] of JP '976 indicates that the invention of claim 4 of JP '976 (base layer and at least one surface layer) is characterized by the degree of chlorination of the vinyl chloride system resin of a surface layer being 50% or more and less than 58%. Paragraph [0025] of JP '976 indicates that if the degree of chlorination of the surface layer is 58% or higher, the chemical resistance of a surface layer, corrosion resistance, etc. become less remarkable. Paragraph [0024] of JP '976 indicates that to maintain a chemical-resistant balance in the plastic, the degree of chlorination of the surface layer should be 50% or more and less than 58%. Accordingly, applicants submit that one of ordinary skill in the art would not be led to employing a PVC having a chlorination degree of from 58 to 73% in the surface layer of JP '976, since such a surface layer is inferior in chemical resistance, and JP '976 aims to provide a plastic that has a chemical-resistant balance achieved with a surface layer having a degree of chlorination of 50% or more and less than 58%.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

The present claim 2 is characterized in using PVC having a chlorination degree of 58 to 73 % both in the base layer and the intermediate layer. There is no description or teaching in JP '976 of the use of PVC having a chlorination degree of 58 to 73 % in both layers. JP '976 is based on the use of PVC having a chlorination degree of 58 to 73 % in the base layer and of PVC having a chlorination degree of 50 or more to less than 58 % in the surface layer.

In Examples 9 and 10 of JP '976, in Table 1, a base layer and a surface layer having different chlorination degrees are used, but JP '976 does not disclose or suggest the use of PVC having a chlorination degree of 58 to 73 % in both a base layer and also in the surface layer. In this regard, claim 2 and JP '976 are significantly different, and claim 2 is not taught or suggested by JP '976.

Further, the present claim 2 refers to a three-layer structure. Since the base layer and the intermediate layer are different from each other in composition, they need to be produced separately, although the chlorination degree is the same between the two layers. Namely, the base layer and the intermediate layer of claim 2 are different vinyl chloride resin sheets.

In JP '976 to Watanabe, there is no description or teaching of such a three-layer structure. It is obvious that the three-layer structure in JP '976 (comprised of a surface layer on both sides of the base layer), in which “a surface layer with a chlorination degree of 50 or more to less than 58%”, “a base layer with a chlorination degree of 58 to 73%” and “a surface layer with a chlorination degree of 50 or more to less than 58%” are laminated together as set forth in claim 4 of JP '976, is different from the three-layer structure as set forth in the present claim 2 consisting

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

of “a base layer with a chlorination degree of 58 to 73%”, “an intermediate layer with a chlorination degree of 58 to 73%” and “an antistatic layer”.

The reason why the chlorination degree of the intermediate layer in claim 2 of the present application is restricted to from 58 to 73% is explained as follows:

The reason why the molding according to claim 2 of the present invention takes on such a structure is as follows.

In the case where an antistatic layer is directly provided on the base layer by means of coating, there is no need of adopting such a three-layer structure. Then, however, the production method is of batch processing type, thus having a low productivity.

Let us assume to adopt, for example, a lamination process as a measure of making the production method continuous in order to improve productivity. Then the production method comprises the fabrication in advance of an antistatic film (an intermediate layer + an antistatic layer) in which the antistatic film is provided in addition to the base layer, and lamination of this antistatic film onto a vinyl chloride resin sheet which acts as the base layer and is under extrusion.

As the resin used for this antistatic film (resin for the intermediate layer), an acrylic film is usually employed. However, in the present invention of claim 2, to obtain a flame-retardant molding product, a vinyl chloride film is used whereby, even when the base layer is made of a film with a chlorination degree of 58 to 73%, a resin with a chlorination degree of 56% for the intermediate layer cannot achieve the flame-retardant property needed for the entire molding.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

Accordingly, it was inevitable to make the antistatic film (intermediate layer) thin in order to prevent the impairment of the flame-retardant property needed for the entire molding. However, with such a thin film, the operability in the lamination process deteriorates, resulting in the need to use an undesirably thick film in order to improve the lamination process.

This film thickness-related issue is involved also in the case where press molding is adopted for making the sheet for base layer and the antistatic film.

The present invention of claim 2, which has resulted from further investigation, has solved the above-cited issue by finding that the use of a vinyl chloride resin with a chlorination degree of 58 to 73% and exhibiting a still better flame-retardant property does not impair the flame-retardant property of the final molding even though the film (intermediate layer) is thick (30 to 500 μm).

Since the film (intermediate layer) is obtained by a production method different from that for the sheet for the base layer which is fabricated by extrusion molding, the composition formulation also differs. Namely, the base layer and the intermediate layer necessarily have different compositions. As has been discussed heretofore, the use of a vinyl chloride resin of a chlorination degree of 58 to 73% as the (intermediate layer) film used for the formation of an antistatic layer has never been thought of as yet.

Thanks to such three-layer structure, the present invention as defined in claim 2 has succeeded in attaining a molding provided with an excellent flame retardant property and a high productivity.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

Moreover, with respect to claim 19(2), Yoshizumi has the difference discussed above in connection with the rejection of claim 1 over JP '230 in view of Yoshizumi. Applicants rely on that discussion.

In view of the above, applicants submit that JP '976 and Yoshizumi do not disclose or suggest the subject matter of claims 2, 19(2), 20(2) and 21(2), and, accordingly, request withdrawal of this rejection.

Claims 2 and 21(2) have been rejected under 35 U.S.C. § 103(a) as obvious over JP '976 (Watanabe '945) in view of Holley.

The Examiner sets forth a detailed statement of this rejection in Paragraph 7, beginning at page 8 of the Office Action.

This rejection is substantially similar to the rejection in Paragraph 6 above, except the Examiner relies on Holley as the secondary reference for teaching an antistatic layer.

JP '976 and claim 2 have the basic difference discussed above in connection with the rejection of claim 2 over JP '976 and Yoshizumi. Applicants rely on that discussion.

There is a disclosure in Holley that a base material having an antistatic property is prepared by coating an antistatic paint. However, since JP '976 does not disclose or teach the use of PVC of 58 to 73% chlorination in both a base layer and an intermediate layer, applicants submit that the combination of JP '976 and Holley would not have led one of ordinary skill in the art to the subject matter of the present claims.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

In view of the above, applicants submit that JP '976 and Holley do not disclose or render obvious the subject matter of claims 2 and 21(2) and, accordingly, request withdrawal of this rejection.

Claims 4, 19(4), 20(4) and 21(4) have been rejected under 35 U.S.C. § 103(a) as obvious over JP '976 (Watanabe '945) in view of Yoshizumi.

The Examiner set forth a detailed statement of this rejection in Paragraph 8 of the Office Action.

This rejection is substantially similar to the rejection on Paragraph 6 above, except that the Examiner applies it to claim 4. It is also similar to the rejection in Paragraph 7 of the previous Office Action.

Applicants have amended claim 4 as set forth above to recite a thickness of the base layer of from 1 to 15 mm, and a thickness of the intermediate layer of from 30 to 500 μm .

Thus, as recited in claim 4, the present invention is directed to an antistatic vinyl chloride resin molding, which comprises a base layer comprising a vinyl chloride resin, an intermediate layer and an antistatic layer containing a conductive material and being laminated on at least one side of said base layer, wherein said base layer comprises 100 parts by weight of a vinyl chloride resin having a chlorination degree of less than 58% and from 0.1 to 2.5 parts by weight of a molybdenum compound, wherein the thickness of the base layer is from 1 to 15 mm, and the intermediate layer comprises a vinyl chloride resin having a chlorination degree of from 58 to

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

73% and has a composition different from that of the base layer, wherein the thickness of the intermediate layer is from 30 to 500 μm .

JP '976 discloses, from claims 2 and 4 thereof, a laminated molding, in which a base layer is formed by containing 4 to 30 parts by weight of titanium oxide and 1 to 10 parts by weight of molybdenum etc. in PVC having a chlorination degree of 58 to 73 %, and wherein a surface layer is formed by containing 0 to 20 parts by weight of titanium oxide and 0 to 80 parts by weight of molybdenum etc. in PVC having a chlorination degree of 50 or more to less than 58 %.

The Examiner explains that the present invention is disclosed by interpreting the base layer of JP '976 as the intermediate layer of the present invention and the surface layer of JP '976 as the base layer of the present invention.

However, applicants submit that one of ordinary skill in the art would not so interpret JP '976 because of the amendments as above, which limit the thickness of the base layer into 1 to 15 mm and the thickness of the intermediate layer into 30 to 500 μm in the present invention.

JP '976 discloses, in Paragraph [0045], a base layer having a thickness of 2 to 12 mm and a surface layer having a thickness of 0.2 to 1.6 mm. Accordingly, one skilled in the art would consider that the base layer of the larger thickness of JP '976 corresponds to the base layer of the larger thickness in claim 4, and the surface layer of the smaller thickness in Watanabe corresponds to the intermediate layer of the smaller thickness in claim 4.

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

The Examiner has provided absolutely no reason or basis why one of ordinary skill in the art would interpret JP '976 in the manner suggested by the Examiner.

Further, even if such an interpretation were to be made, one of ordinary skill in the art still would not be led to the invention set forth in claim 4. As discussed above, JP '976 discloses that the base layer should have a thickness of 2 to 12 mm, corresponding to 2000 μm to 12000 μm . If such a base layer is considered to be the intermediate layer of claim 4, it fails to satisfy the recitation of claim 4 that the intermediate layer has a thickness of 30 to 500 μm .

Also, as mentioned before, with respect to claim 4 (19), Yoshizumi discloses the use of vinyl chloride resin as the antistatic layer, but does not teach or suggest the use of PVC having a chlorination degree of 58 to 73 %.

In view of the above, applicants submit that JP '976 and Yoshizumi do not disclose or render obvious the subject matter of claims 4, 19 (4), 20 (4) and 21 (4) and, accordingly, request withdrawal of this rejection.

Claims 4 and 21 (4) have been rejected under 35 U.S.C. § 103(a) as obvious over JP '976 (Watanabe '945) in view of Holley.

The Examiner sets forth a detailed statement of this rejection in Paragraph 9, beginning at page 11 of the Office Action.

This rejection is substantially similar to the rejection in Paragraph 8 above, except that the Examiner relies on Holley for the antistatic layer.

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/964,693
Atty Docket No.: Q66444

As mentioned above, JP '976 does not teach or suggest an intermediate layer having a thickness of 30 μm to 500 μm and comprised of a PVC having a chlorination degree of 58 to 73%.

There is a disclosure in the Holley patent that a base material having antistatic property is prepared by coating an antistatic paint. However, since JP '976 does not describe or suggest the use of intermediate layer (surface layer) of claim 4, applicants submit that the combination of JP '976 and Holley would not have led one of ordinary skill in the art to the subject matter of the present claims.

In view of the above, applicants submit that JP '976 and Holley do not disclose or suggest the subject matter of claims 4 and 21 (4) and, accordingly, request withdrawal of this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 09/964,693

Atty Docket No.: Q66444

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER



Sheldon I. Landsman

Registration No. 25,430

Date: April 19, 2004